```
    GAATTCGGCACGAGGTTTTTTTTTTTTTTTTTCCCCTCTTTTCTTTCTTTTCCTTTTGCC
  1 ---------+---------+---------+---------+---------+---------+ 60

    ATCCGAAAGAGCTGTCAGCCGCCGCCGGGCTGCACCTAAAGGCGTCGGTAGGGGGATAAC
 61 ---------+---------+---------+---------+---------+---------+ 120

    AGTCAGAGACCCTCCTGAAAGCAGGAGACGGACGGTACCCCTCCGGCTCTGCGGGGCGG
121 ---------+---------+---------+---------+---------+---------+ 180

    CTGCGGCCCCTCCGTTCTTTCCCCCTCCCCGAGAGACACTCTTCCTTTCCCCCCACGAAG
181 ---------+---------+---------+---------+---------+---------+ 240

    ACACAGGGGCAGGAACGCGAGCGCTGCCCCTCCGCCATGGAGGCCGCTTCCTGCTGACG
241 ---------+---------+---------+---------+---------+---------+ 300
```

FIG. 1A

301 CTCGCCCTCCTCTCGGCGCTGCTGTGCCGCTGCCAGGTTGACGGCTCCGGGGTGTTCGAG 360

361 CTGAAGCTGCAGGAGTTTGTCAACAAGAAGGGGCTGCTCAGCAACCGCAACTGCTGCCGG 420

421 GGGGGCGGCCCCGGAGGCGCCGGGCAGCAGCAGTGCGACTGCAAGACCTTCTTCCGCGTC 480

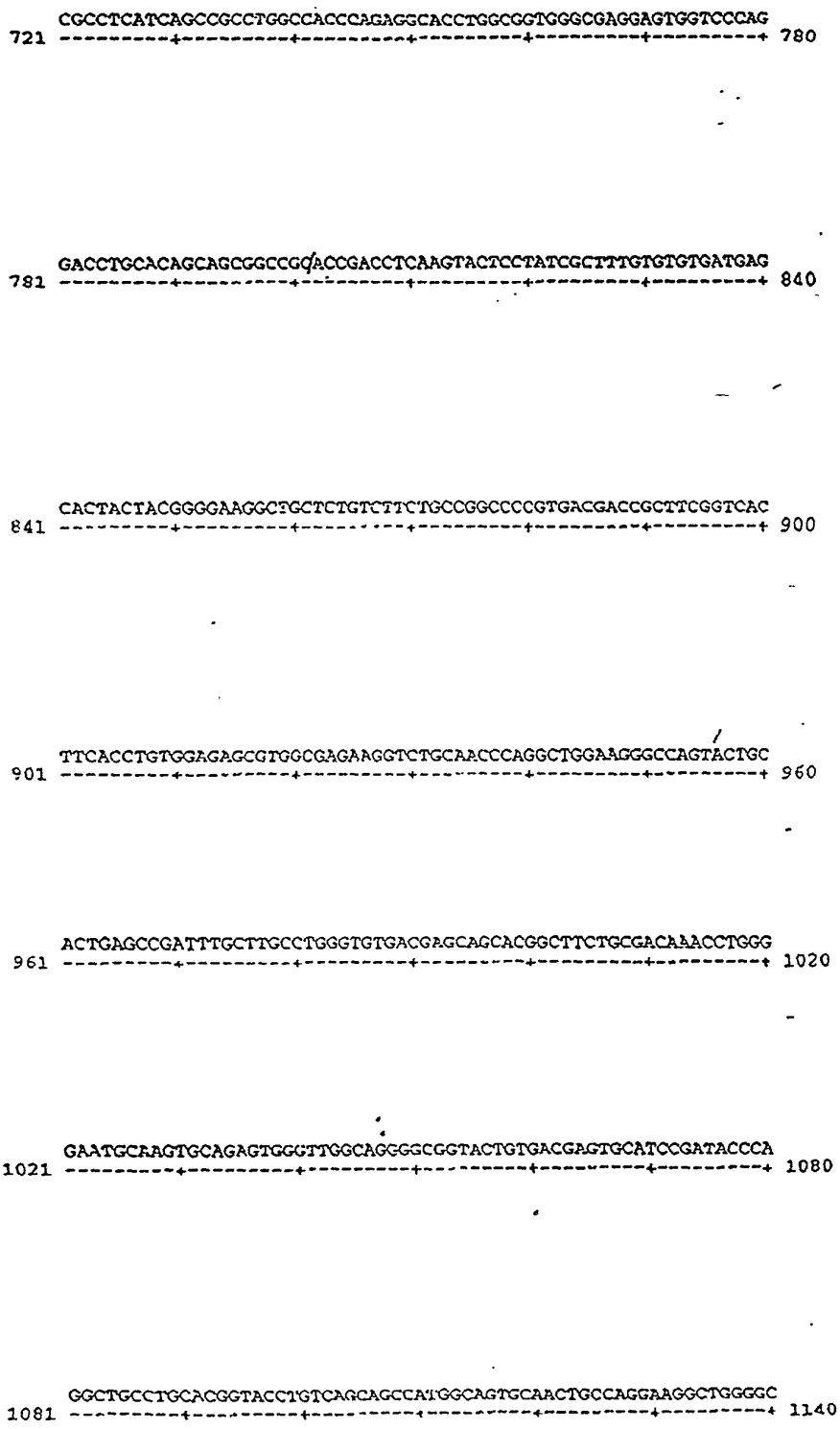
481 TGCCTGAAGCACTACCAGGCCAGCGTCTCCCCCGAGCCGCCCTGCACCTACGGCAGCGCC 540

541 ATCACCCCCGTCCTCGGCGCCAACTCCTTCAGCGTCCCCGACGGCGCGGGCGGCGCCGAC 600

601 CCCGCCTTCAGCAACCCCATCCGCTTCCCCTTCGGCTTCACCTGGCCCGGCACCTTCTCG 660

661 CTCATCATCGAGGCTCTGCACACCGACTCCCCCGACGACCTCACCACAGAAAACCCCGAG 720

FIG. 1A (cont'd)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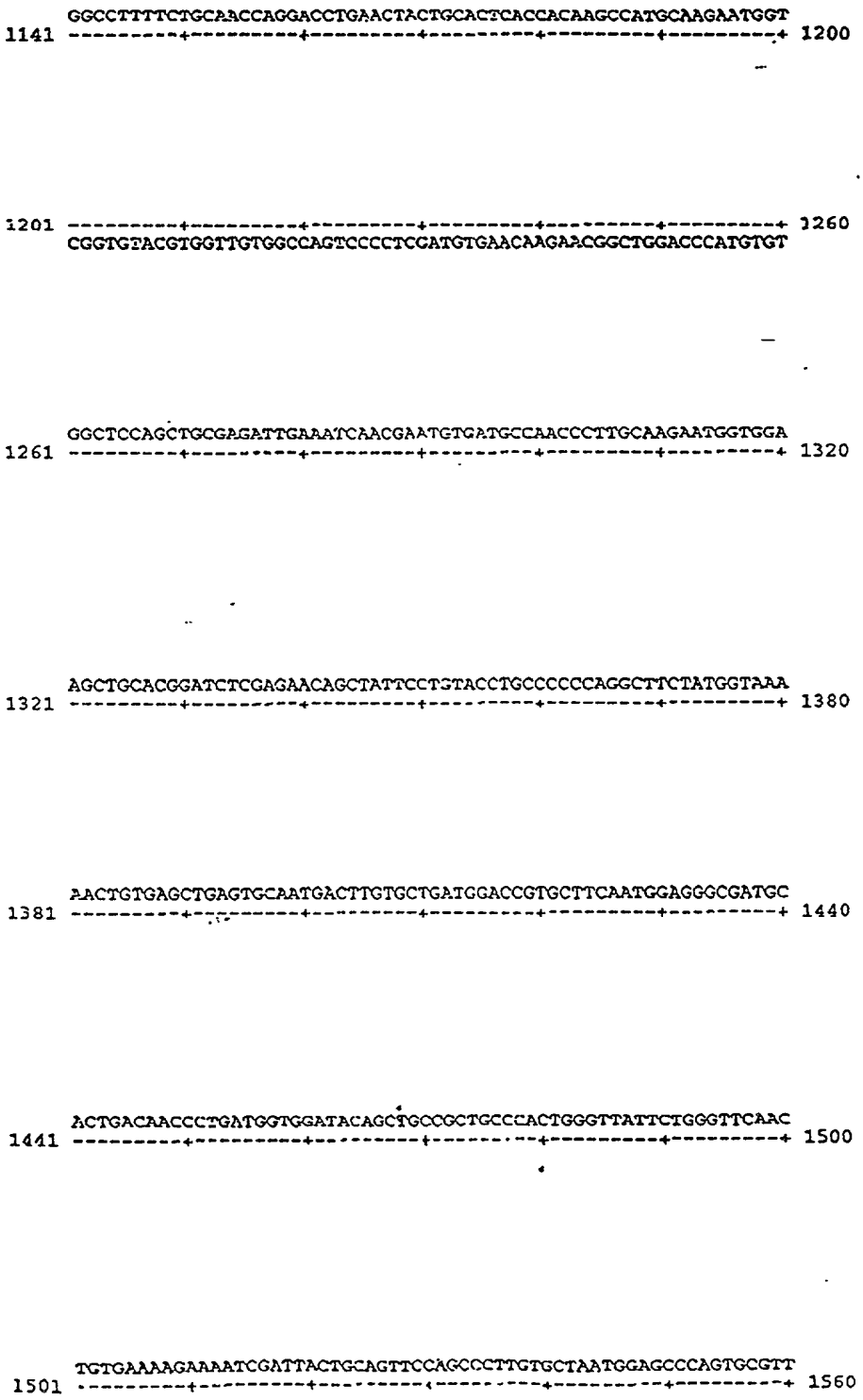
781 GACCTGCACAGCAGCGGCCGGACCGACCTCAAGTACTCCTATCGCTTTGTGTGTGATGAG 840
841 CACTACTACGGGGAAGGCTGCTCTGTCTTCTGCCGGCCCCGTGACGACCGCTTCGGTCAC 900
901 TTCACCTGTGGAGAGCGTGGCGAGAAGGTCTGCAACCCAGGCTGGAAGGGCCAGTACTGC 960
961 ACTGAGCCGATTTGCTTGCCTGGGTGTGACGAGCAGCACGGCTTCTGCGACAAACCTGGG 1020
1021 GAATGCAAGTGCAGAGTGGGTTGGCAGGGGCGGTACTGTGACGAGTGCATCCGATACCCA 1080
1081 GGCTGCCTGCACGGTACCTGTCAGCAGCCATGGCAGTGCAACTGCCAGGAAGGCTGGGGC 1140

FIG. 1A (cont'd)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1141
1200
1201
1260
CGGTGTACGTGGTTGTGGCCAGTCCCCTCGATGTGAACAAGAACGGCTGGACCCATGTGT
GGCTCCAGCTGCGAGATTGAAATCAACGAATGTGATGCCAACCCTTGCAAGAATGGTGGA
1261
1320
AGCTGCACGGATCTCGAGAACAGCTATTCCTGTACCTGCCCCCCAGGCTTCTATGGTAAA
1321
1380
AACTGTGAGCTGAGTGCAATGACTTGTGCTGATGGACCGTGCTTCAATGGAGGGCGATGC
1381
1440
ACTGACAACCCTGATGGTGGATACAGCTGCCGCTGCCCACTGGGTTATTCTGGGTTCAAC
1441
1500
TGTGAAAAGAAAATCGATTACTGCAGTTCCAGCCCTTGTGCTAATGGAGCCCAGTGCGTT
1501
1560

FIG. 1A (cont'd)

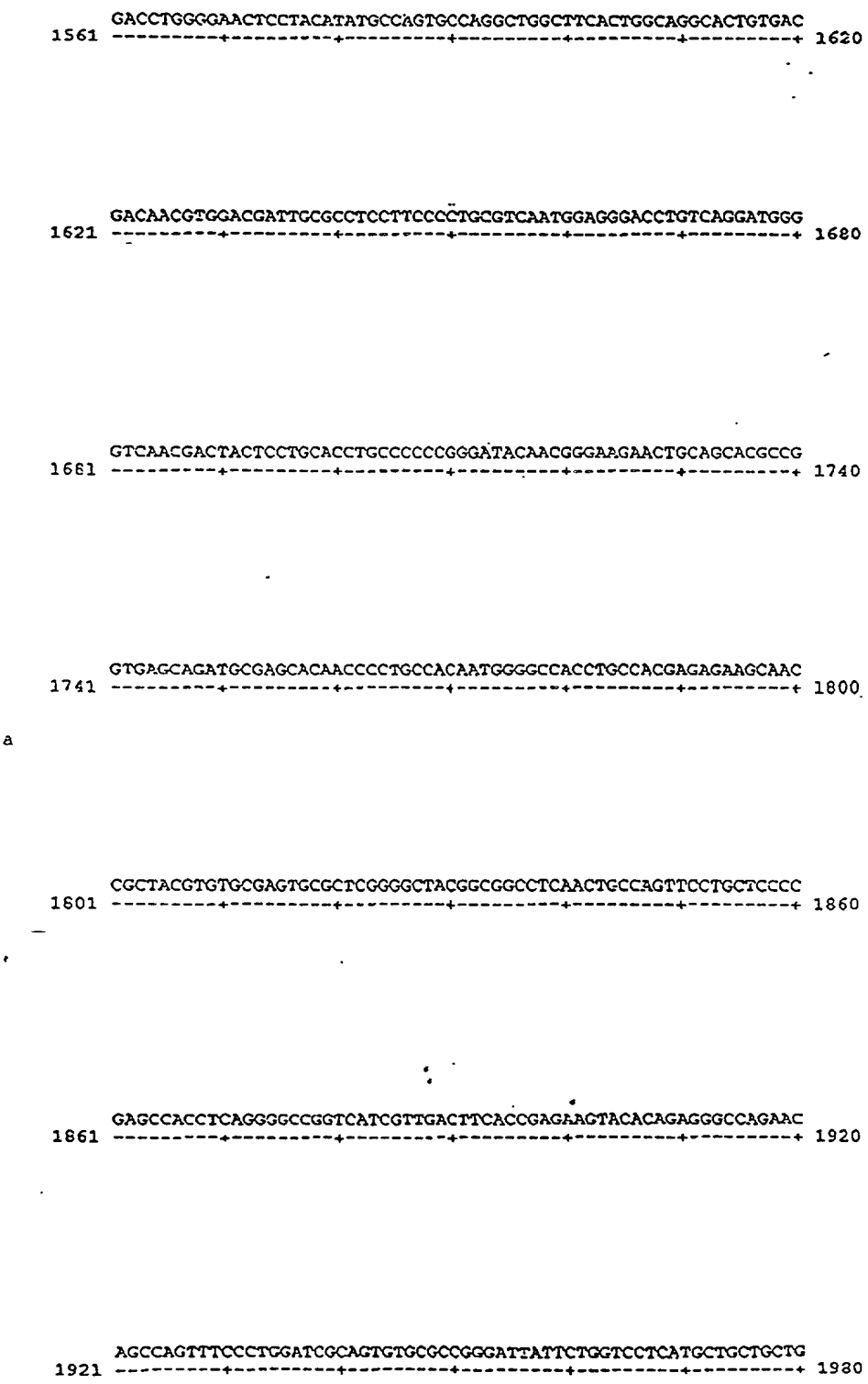

1561 GACCTGGGGAACTCCTACATATGCCAGTGCCAGGCTGGCTTCACTGGCAGGCACTGTGAC 1620
1621 GACAACGTGGACGATTGCGCCTCCTTCCCCTGCGTCAATGGAGGGACCTGTCAGGATGGG 1680
1681 GTCAACGACTACTCCTGCACCTGCCCCCCGGGATACAACGGGAAGAACTGCAGCACGCCG 1740
1741 GTGAGCAGATGCGAGCACAACCCCTGCCACAATGGGGCCACCTGCCACGAGAGAAGCAAC 1800
1801 CGCTACGTGTGCGAGTGCGCTCGGGGCTACGGCGGCCTCAACTGCCAGTTCCTGCTCCCC 1860
1861 GAGCCACCTCAGGGGCCGGTCATCGTTGACTTCACCGAGAAGTACACAGAGGGCCAGAAC 1920
1921 AGCCAGTTTCCCTGGATCGCAGTGTGCGCCGGGATTATTCTGGTCCTCATGCTGCTGCTG 1980

FIG. 1A (cont'd)

```
                TACCAGTCGGTGTACGTCATATCAGAAGAGAAAGATGAGTGCATCATAGCAACTGAGGTG
2401 ----------+----------+----------+----------+----------+---------- 2460

                TAAAACAGACGTGACGTGGCAAAGCTTATCGATACCGTCATCAAGCTT
2461 ----------+----------+----------+----------+--------- 2508
```

FIG. 1A (cont'd)

```
1 GAATTCGGCACGAGGTTTTTTTTTTTTTTTTCCCCTCTTTTCTTTCTTTTCCTTTTGCCATCCGAAAG 69

70 AGCTGTCAGCCGCCGCCGGGGCTGCACCTAAAGGCGTCGGTAGGGGGATAACAGTCAGAGACCCTCCTGA 138

139 AAGCAGGAGACGGGACGGTACCCCTCCGGCTCTGCGGGGCGGCTGCGGCCCCTCCGTTCTTTCCCCCTC 207

208 CCCGAGAGACACTCTTCCTTTCCCCCCACGAAGACACAGGGGCAGGAACGCGAGCGCTGCCCCTCCGCC 276

277 ATGGGAGGCCGCTTCCTGCTGACGCTCGCCCTCCTCTCGGCGCTGCTGTGCCGCTGCCAGGTTGACGGC 345

346 TCCGGGGTGTTCGAGCTGAAGCTGCAGGAGTTTGTCAACAAGAAGGGGCTGCTCAGCAACCGCAACTGC 414

415 TGCCGGGGGGGCGGCCCCCGGAGGCGCCGGGCAGCAGCAGTGCGACTGCAAGACCTTCTTCCGCGTCTGC 483
```

FIG. 1B

484 CTGAAGCACTACCAGGCCAGCGTCTCCCCCGAGCCGCCCTGCACCTACGGCAGCGCCAT

553 CTCGGCGCCAACTCCTTCAGCGTCCCCGACGGCGCGGGCGGCGCCGACCCCGCCTTCA

622 CGCTTCCCCTTCGGCTTCACCTGGCCCGGCACCTTCTCGCTCATCATCGAGGCTCTGCT

691 CCCGACGACCTCACCACAGAAAACCCCGAGCGCCTCATCAGCCGCCTGGCCACCCAGA

760 GTGGGCGAGGAGTGGTCCCAGGACCTGCACAGCAGCGGCCGCACCGACCTCAAGTACT

FIG. 1B (cont'd)

GTGTGATGAGCACTACTACGGGGAAGGCTGCTCTGTCTTCTGCGGGCCCCGTGACGACCGCTTCGGT 897

898 CACTTCACCTGTGGAGAGCGTGGCGAGAAGGTCTGCAACCCAGGCTGGAAGGGCCAGTACTGCACTGAG 966

967 CCGATTTGCTTGCCTGGGTGTGACGAGCAGCACGGCTTCTGCGACAAACCTGGGGAATGCAAGTGCAGA 1035

1036 GTGGGTTGGCAGGGGCGGTACTGTGACGAGTGCATCCGATACCCAGGCTGCCTGCACGGTACCTGTCAG 1104

1105 CAGCCATGGCAGTGCAACTGCCAGGAAGGCTGGGGCGGCCTTTTCTGCAACCAGGACCTGAACTACTGC 1173

1174 ACTCACCACAAGCCATGCAAGAATGGTGCCACATGCACCAACACCGGTCAGGGGAGCTACACTTGTTCT 1242

1243 TGCCGACCTGGGTACACAGGCTCCAGCTGCGAGATTGAAATCAACGAATGTGATGCCAACCCTTGCAAG 1311

FIG. 1B (cont'd)

1312 AATGGTGGAAGCTGCACGGATCTCGAGAACAGCTATTCCTGTACCTGCCCCCCAGGCTTCTATGGTAAA 1380

1381 AACTGTGAGCTGAGTGCAATGACTTGTGCTGATGGACCGTGCTTCAATGGAGGGCGATGCACTGACAAC 1449

1450 CCTGATGGTGGATACAGCTGCCGCTGCCCACTGGGTTATTCTGGGTTCAACTGTGAAAAGAAAATCGAT 1518

1519 TACTGCAGTTCCAGCCCTTGTGCTAATGGAGCCCAGTGCGTTGACCTGGGGAACTCCTACATATGCCAG 1587

1588 TGCCAGGCTGGCTTCACTGGCAGGCACTGTGACGACAACGTGGACGATTGCGCCTCCTTCCCCTGCGTC 1656

1657 AATGGAGGGACCTGTCAGGATGGGGTCAACGACTACTCCTGCACCTGCCCCCCGGGATACAACGGGAAG 1725

FIG. 1B (cont'd)

1726 AACTGCAGCACGCCGGTGAGCAGATGCGAGCACAACCCCTGCCACAATGGGGCCACCTGCCACGAGAGA 1794

1795 AGCAACCGCTACGTGTGCGAGTGCGCTCGGGGCTACGGCGGCCTCAACTGCCAGTTCCTGCTCCCCGAG 1863

1864 CCACCTCAGGGGCCGGTCATCGTTGACTTCACCGAGAAGTACACAGAGGGCCAGAACAGCCAGTTTCCC 1932

1933 TGGATCGCAGTGTGCGCCGGGATTATTCTGGTCCTCATGCTGCTGCTGGGTTGCGCCGCCATCGTCGTC 2001

2002 TGCGTCAGGCTGAAGGTGCAGAAGAGGCACCACCAGCCGGAGGCCTGCAGGAGTGAAACGGAGACCATG 2070

2071 AACAACCTGGCGAACTGCCAGCGCGAGAAGGACATCTCCATCAGCGTCATCGGTGCCACTCAGATTAAA 2139

2140 AACACAAATAAGAAAGTAGACTTTCACAGCGATAACTCCGATAAAAACGGCTACAAAGTTAGATACCCA 2208

FIG. 1B (cont'd)

2209 TCAGTGGATTACAATTTGGTGCATGAACTCAAGAATGAGGACTCTGTGAAAGAGGAGCATGGCAAATGC 2277

2278 GAAGCCAAGTGTGAAACGTATGATTCAGAGGCAGAAGAGAAAAGCGCAGTACAGCTAAAAAGTAGTGAC 2346

2347 ACTTCTGAAAGAAAACGGCCAGATTCAGTATATTCCACTTCAAAGGACACAAAGTACCAGTCGGTGTAC 2415

2416 GTCATATCAGAAGAGAAAGATGAGTGCATCATAGCAACTGAGGTTAGTATCCCACCTGGCAGTCGGACA 2484

2485 AGTCTTGGTGTGTGATTCCCATCCAGCGCAGGTCAGGGCGGCCAAACCATTCTACCTGCTGCCACAGTC 2553

2554 ATCTGTACCCAATGAAAACTGGCCACCTTCAGTCTGTGGCACTGCAGACGTTGAAAAAACTTGTTGTGG 2622

FIG. 1B (cont'd)

2623 ATTAACATAAGCTCCAGTGGGGGTTACAGGGACAGCAATTTTTGCAGGCAAGGGTATAACTGTAGTGCA 2691

2692 GTTGTAGCTTACTAACCCTACTGACTCATTCTTTCGTGTGCTTCCTGCAGAGCCTGTTTTTGCTTGGCA 2760

2761 TTGAGGTGAAGTCCTGACCCTCTGCATCCTCATAGTCCTCTGCTTTCTTTTTATTAACCTCTTCTGGTC 2829

2830 TCTGCTTGTGTTTTCTCTCAACAGGTGTAAAACAGACGTGACGTGGCAAAGCTT 2883

FIG. 1B (cont'd)

```
  1 MGGRFLLTLA LLSALLCRCQ VDGSGVFELK LQEFVNKKGL LSNRNCCRGG GPGGAGQQQC
 61 DCKTFFRVCL KHYQASVSPE PPCTYGSAIT PVLGANSFSV PDGAGGADPA FSNPIRFPFG
121 FTWPGTFSLI IEALHTDSPD DLTTENPERL ISRLATQRHL AVGEEWSQDL HSSGRTDLKY
181 SYRFVCDEHY YGEGCSVFCR PRDDRFGHPT CGERGEKVCN PGWKGQYCTE PICLPGCDEQ
241 HGFCDKPGEC KCRVGWQGRY CDECIRYPGC LHGTCQQPWQ CNCQEGWGGL FCNQDLNYCT
301 HHKPCKNGAT CTNTGQGSYT CSCRPGYTGS SCEIEINECD ANPCKNGGSC TDLENSYSCT
361 CPPGFYGKNC ELSAMTCADG PCFNGGRCTD NPDGGYSCRC PLGYSGFNCE KKIDYCSSSP
421 CANGAQCVDL GNSYICQCQA GFTGRHCDDN VDDCASFPCV NGGTCQDGVN DYSCTCPPGY
481 NGKNCSTPVS RCEHNPCHNG ATCHERSNRY VCECARGYGG LNCQFLLPEP PQGPVIVDFT
541 EKYTEGQNSQ FPWIAVCAGI ILVLMLLLGC AAIVVCVRLK VQKRHHQPEA CRSETETMNN
601 LANCQREKDI SISVIGATQI KNTNKKVDFH SDNSDKNGYK VRYPSVDYNL VHELKNEDSV
661 KEEHGKCEAK CETYDSEAEE KSAVQLKSSD TSERKRPDSV YSTSKDTKYQ SVYVISEEKD
721 ECIIATEV
```

FIG. 2

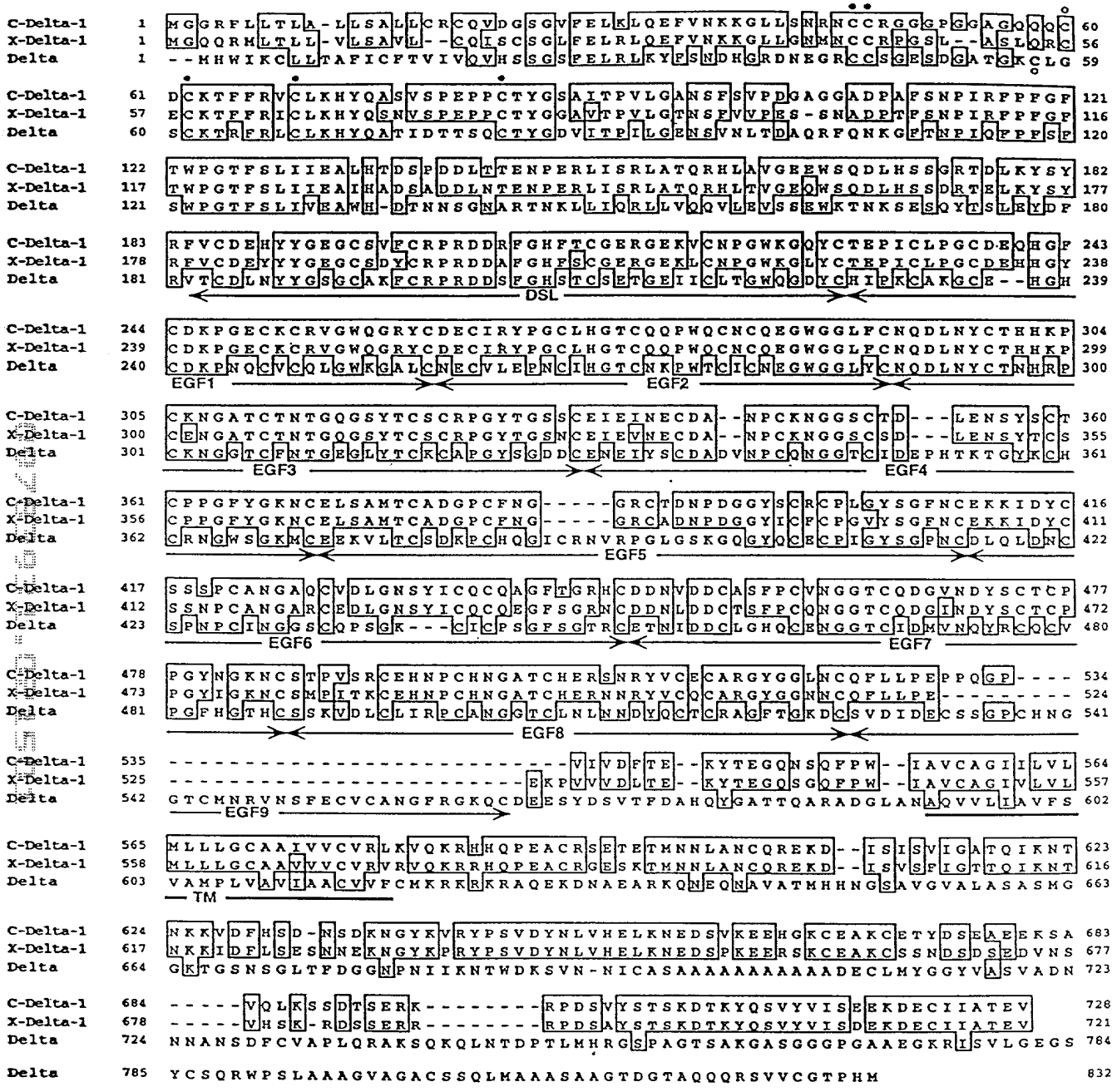

C-Delta-1
X-Delta-1
Delta
DSL
EGF1
EGF2
EGF3
EGF4
EGF5
EGF6
EGF7
EGF8
EGF9
TM

FIG. 3

```
C-Delta-1     184  V-CDEHYYGE G-CSVFCRPR DDRFGHFTCG ERGEKVCNPG WKGQYC   228
Delta         182  VTCDLNYYGS G-CAKFCRPR DDSFGHSTCS ETGEIICLTG WQGDYC   226
Serrate       235  VQCAVTYYNT TFCTTFCRPR DDQFGHYACG SEGQKLCLNG WQGVNC   279
C-Serrate-1        VTCAEHYYGF G-CNKFCRPR DDFFTHHTCD QNGNKTCLEG WTGPEC

apx-1         130  NLCSSNYHGK R-CNRYCIAN -AKLHWE-CS THGVRRCSAG WSGEDC   172
lag-2         120  VTCARNYFGN R-CENFCDAH LAKAARKRCD AMGRLRCDIG WMGPHC   166
```

FIG. 4

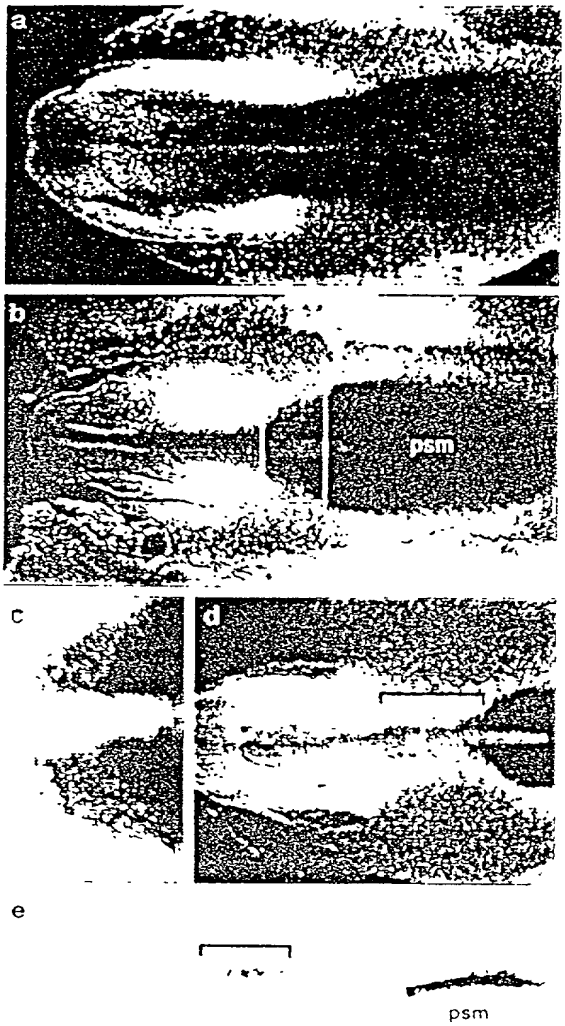


FIG. 5

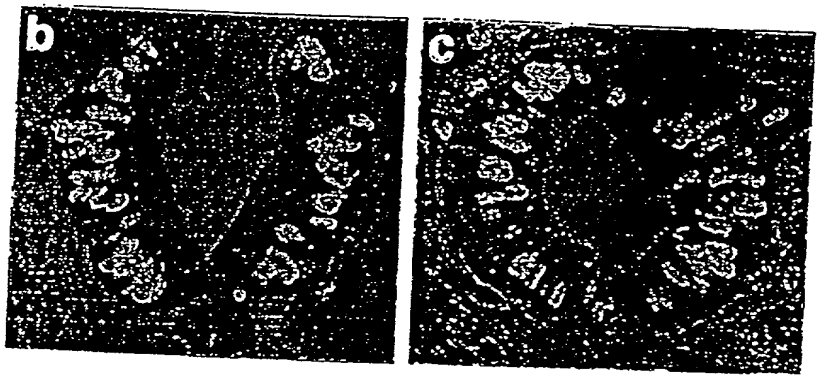


FIG. 6B FIG. 6C

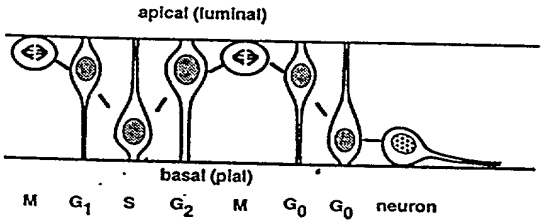


FIG. 6A

```
CTGCAGGAAT TCSMYCGCAT GCTCCCGGCC GCCATGGGCC GTCGGAGCGC GCTAGCCCTT      60
GCCGTGGTCT CTGCCCTGCT GTGCCAGGTC TGGAGCTCCG GCGTATTTGA GCTGAAGCTG     120
CAGGAGTTCG TCAACAAGAA GGGGCTGCTG GGGAACCGCA ACTGCTGCCG CGGGGGCTCT     180
GGCCCGCCTT GCGCCTGCAG GACCTTCTTT CGCGTATGCC TCAAGCACTA CCAGGCCAGC     240
GTGTCACCGG AGCCACCCTG CACCTACGGC AGTGCCGTCA CGCCAGTGCT GGGTGTCGAC     300
TCCTTCAGCC TGCCTGATGG CGCAGGCATC GACCCCGCCT TCAGCAACCC CATCCGATTC     360
CCCTTCGGCT TCACCTGGCC AGGTACCTTC TCTCTGATCA TTGAAGCCCT CCATACAGAC     420
TCTCCCGATG ACCTCGCAAC AGAAAACCCA GAAAGACTCA TCAGCCGCCT GACCACACAG     480
AGGCACCTCA CTGTGGGAGA AGAATGGTCT CAGGACCTTC ACAGTAGCGG CCGCACAGAC     540
CTCCGGTACT CTTACCGGTT TGTGTGTGAC GAGCACTACT ACGGAGAAGG TTGCTCTGTG     600
TTCTGCCGAC CTCGGGATGA CGCCTTTGGC CACTTCACCT GCGGGGACAG AGGGGAGAAG     660
ATGTGCGACC CTGGCTGGAA AGGCCAGTAC TGCACTGACC CAATCTGTCT GCCAGGGTGT     720
GATGACCAAC ATGGATACTG TGACAAACCA GGGGAGTGCA AGTGCAGAGT TGGCTGGCAG     780
GGCCGCTACT GCGATGAGTG CATCCGATAC CCAGGTTGTC TCCATGGCAC CTGCCAGCAA     840
CCCTGGCAGT GTAACTGCCA GGAAGGCTGG GGGGGCCTTT TCTGCAACCA AGACCTGAAC     900
TACTGTACTC ACCATAAGCC GTGCAGGAAT GGAGCCACCT GCACCAACAC GGGCCAGGGG     960
AGCTACACAT GTTCCTGCCG ACCTGGGTAT ACAGGTGCCA ACTGTGAGCT GGAAGTAGAT    1020
GAGTGTGCTC CTAGCCCCTG CAAGAACGGA GCGAGCTGCA CGGACCTTGA GGACAGCTTC    1080
TCTTGCACCT GCCCTCCCGG CTTCTATGGC AAGGTCTGTG AGCTGAGCGC CATGACCTGT    1140
GCAGATGGCC CTTGCTTCAA TGGAGGACGA TGTTCAGATA ACCCTGACGG AGGCTACACC    1200
TGCCATTGCC CCTTGGGCTT CTCTGGCTTC AACTGTGAGA AGAAGATGGA TCTCTGCGGC    1260
TCTTCCCCTT GTTCTAACGG TGCCAAGTGT GTGGACCTCG GCAACTCTTA CCTGTGCCGG    1320
TGCCAGGCTG GCTTCTCCGG GAGGTACTGC GAGGACAATG TGGATGACTG TGCCTCCTCC    1380
CCGTGTGCAA ATGGGGGCAC CTGCCGGGAC AGTGTGAACG ACTTCTCCTG TACCTGCCCA    1440
CCTGGCTACA CGGGCAAGAA CTGCAGCGCC CCTGTCAGCA GGTGTGAGCA TGCACCCTGC    1500
CATAATGGGG CCACCTGCCA CCAGAGGGGC CAGCGCTACA TGTGTGAGTG CGCCCAGGGC    1560
TATGGCGGCC CCAACTGCCA GTTTCTGCTC CCTGAGCCAC CACCAGGGCC CATGGTGGTG    1620
GACCTCAGTG AGAGGCATAT GGAGAGCCAG GGCGGGCCCT TCCCCTGGGT GGCCGTGTGT    1680
GCCGGGGTGG TGCTTGTCCT CCTGCTGCTG CTGGGCTGTG CTGCTGTGGT GGTCTGCGTC    1740
CGGCTGAAGC TACAGAAACA CCAGCCTCCA CCTGAACCCT GTGGGGGAGA GACAGAAACC    1800
ATGAACAACC TAGCCAATTG CCAGCGCGAG AAGGACGTTT CTGTTAGCAT CATTGGGGCT    1860
ACCCAGATCA AGAACACCAA CAAGAAGGCG GACTTTCACG GGGACCATGG AGCCGAGAAG    1920
AGCAGCTTTA AGGTCCGATA CCCCACTGTG GACTATAACC TCGTTCGAGA CCTCAAGGGA    1980
GATGAAGCCA CGGTCAGGGA TACACACAGC AAACGTGACA CCAAGTGCCA GTCACAGAGC    2040
TCTGCAGGAG AAGAGAAGAT CGCCCCAACA CTTAGGGGTG GGGAGATTCC TGACAGAAAA    2100
AGGCCAGAGT CTGTCTACTC TACTTCAAAG GACACCAAGT ACCAGTCGGT GTATGTTCTG    2160
TCTGCAGAAA AGGATGAGTG TGTTATAGCG ACTGAGGTGT AAGATGGAAG CGATGTGGCA    2220
AAATTCCCAT TTCTCTTAAA TAAAATTCCA AGGATATAGC CCCGATGAAT GCTGCTGAGA    2280
GAGGAAGGGA GAGGAAACCC AGGGACTGCT GCTGAGAACC AGGTTCAGGC GAACGTGGTT    2340
CTCTCAGAGT TAGCAGAGGC GCCCGACACT GCCAGCCTAG GCTTTGGCTG CCGCTGGACT    2400
GCCTGCTGGT TGTTCCCATT GCACTATGGA CAGTTGCTTT GAAGAGTATA TATTTAAATG    2460
GACGAGTGAC TTGATTCATA TAGGAAGCAC GCACTGCCCA CACGTCTATC TTGGATTACT    2520
ATGAGCCAGT CTTTCCTTGA ACTAGAAACA CAACTGCCTT TATTGTCCTT TTTGATACTG    2580
AGATGTGTTT TTTTTTTTTC CTAGACGGGA AAAAGAAAAC GTGTGTTATT TTTTTTGGGA    2640
TTTGTAAAAA TATTTTTCAT GATTATGGGA GAGCTCCCAA CGCGTTGGAG GT            2692
```

FIG. 7

MGRRSALALA VVSALLCQVW SSGVFELKLQ EFVNKKGLLG NRNCCRGGSG 50
PPCACRTFFR VCLKHYQASV SPEPPCTYGS AVTPVLGVDS FSLPDGAGID 100
PAFSNPIRFP FGFTWPGTFS LIIEALHTDS PDDLATENPE RLISRLTTQR 150
HLTVGEEWSQ DLHSSGRTDL RYSYRFVCDE HYYGEGCSVF CRPRDDAFGH 200
FTCGDRGEKM CDPGWKGQYC TDPICLPGCD DQHGYCDKPG ECKCRVGWQG 250
RYCDECIRYP GCLHGTCQQP WQCNCQEGWG GLFCNQDLNY CTHHKPCRNG 300
ATCTNTGQGS YTCSCRPGYT GANCELEVDE CAPSPCKNGA SCTDLEDSFS 350
CTCPPGFYGK VCELSAMTCA DGPCFNGGRC SDNPDGGYTC HCPLGFSGFN 400
CEKKMDLCGS SPCSNGAKCV DLGNSYLCRC QAGFSGRYCE DNVDDCASSP 450
CANGGTCRDS VNDFSCTCPP GYTGKNCSAP VSRCEHAPCH NGATCHQRGQ 500
RYMCECAQGY GGPNCQFLLP EPPPGPMVVD LSERHMESQG GPFPWVAVCA 550
GVVLVLLLLL GCAAVVVCVR LKLQKHQPPP EPCGGETETM NNLANCQREK 600
DVSVSIIGAT QIKNTNKKAD FHGDHGAEKS SFKVRYPTVD YNLVRDLKGD 650
EATVRDTHSK RDTKCQSQSS AGEEKIAPTL RGGEIPDRKR PESVYSTSKD 700
TKYQSVYVLS AEKDECVIAT EV 722

FIG. 8

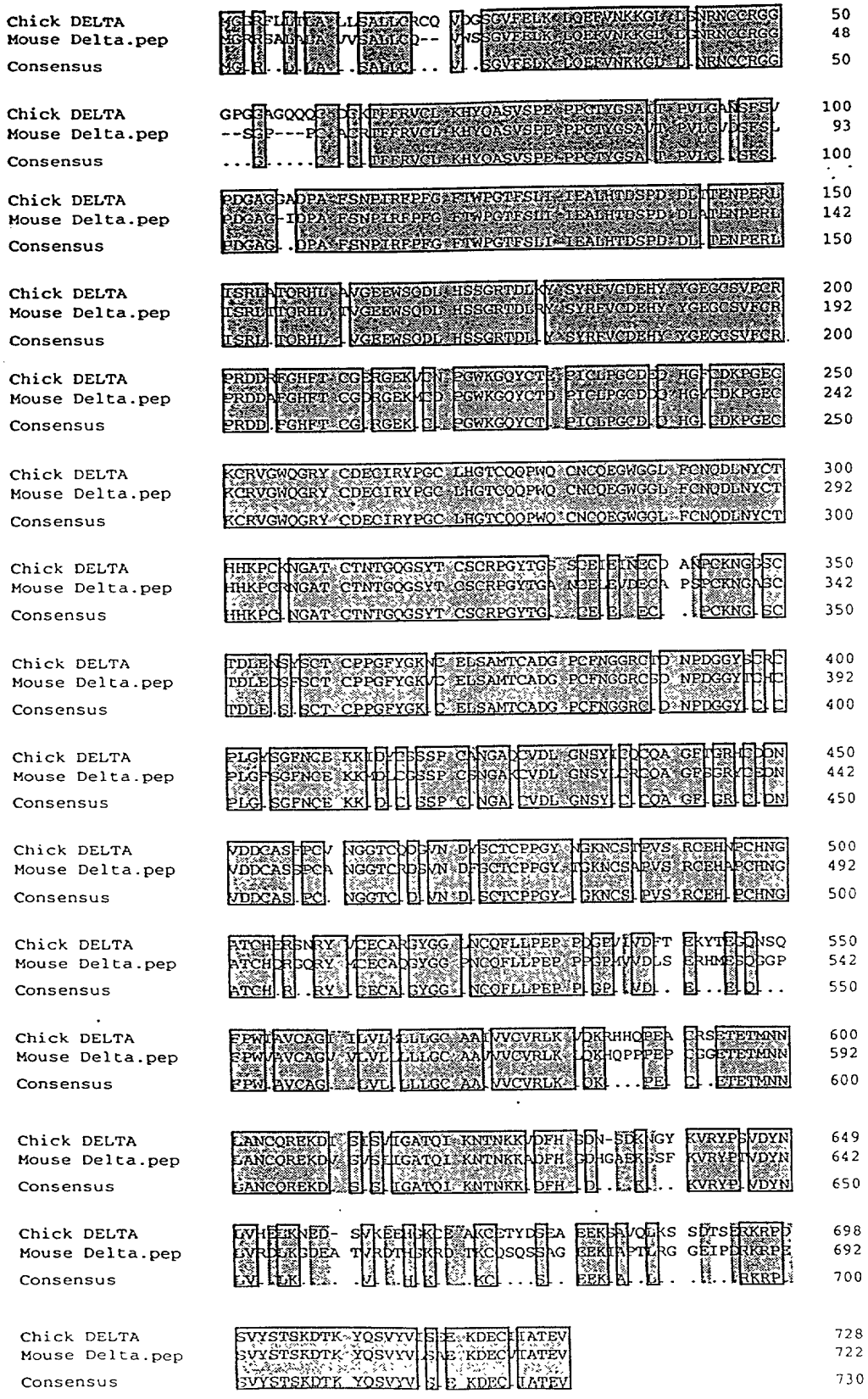
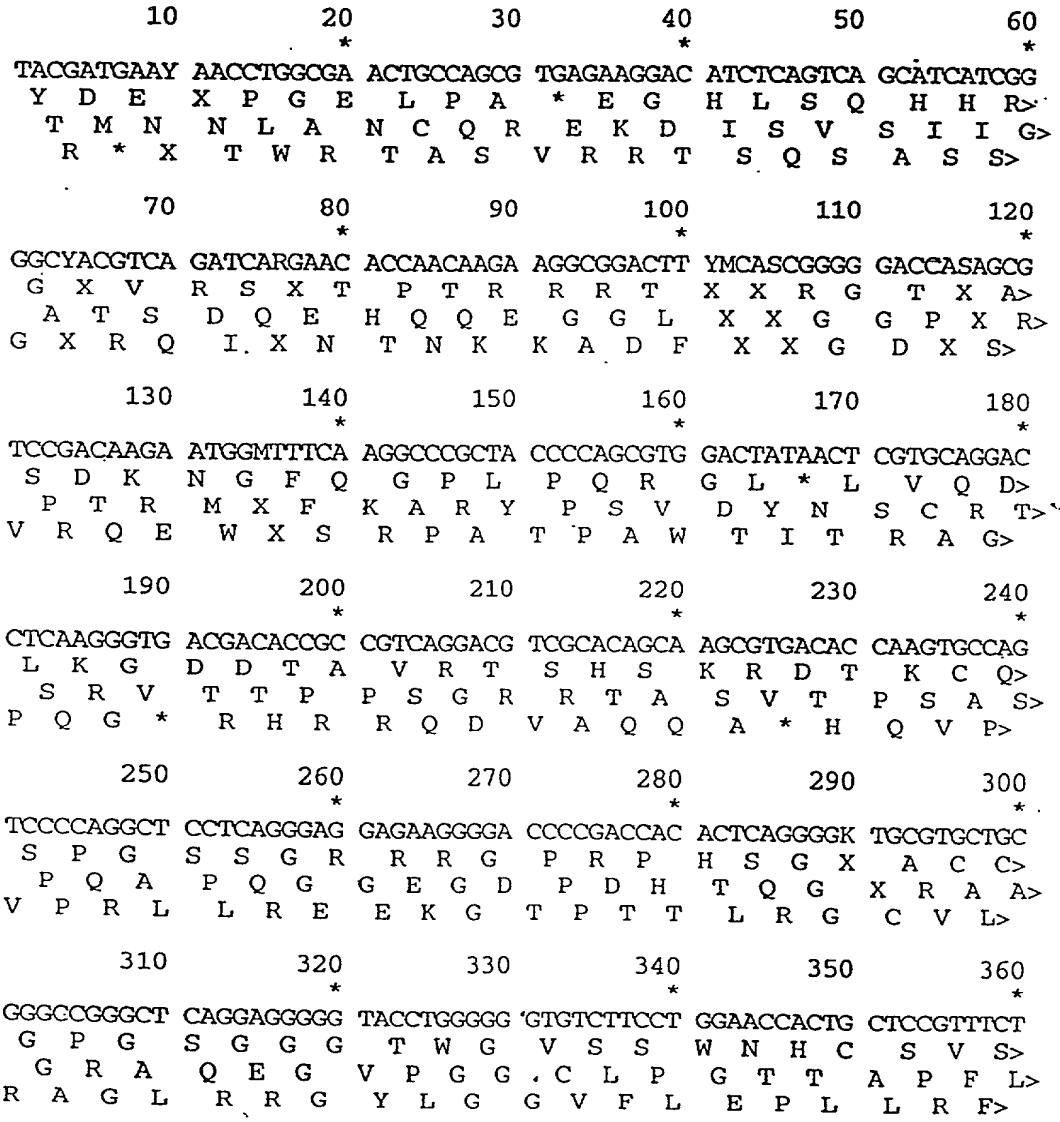


FIG. 9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Y D E X P G E L P A * E G H L S Q H H R>
T M N N L A N C Q R E K D I S V S I I G>
R * X T W R T A S V R R T S Q S A S S>
70 80 90 100 110 120
GGCYACGTCA GATCARGAAC ACCAACAAGA AGGCGGACTT YMCASCGGGG GACCASAGCG
G X V R S X T P T R R R T X X R G T X A>
A T S D Q E H Q Q E G G L X X G G P X R>
G X R Q I X N T N K K A D F X X G D X S>
130 140 150 160 170 180
TCCGACAAGA ATGGMTTTCA AGGCCCGCTA CCCCAGCGTG GACTATAACT CGTGCAGGAC
S D K N G F Q G P L P Q R G L * L V Q D>
P T R M X F K A R Y P S V D Y N S C R T>
V R Q E W X S R P A T P A W T I T R A G>
190 200 210 220 230 240
CTCAAGGGTG ACGACACCGC CGTCAGGACG TCGCACAGCA AGCGTGACAC CAAGTGCCAG
L K G D D T A V R T S H S K R D T K C Q>
S R V T T P P S G R R T A S V T P S A S>
P Q G * R H R R Q D V A Q Q A * H Q V P>
250 260 270 280 290 300
TCCCCAGGCT CCTCAGGGAG GAGAAGGGGA CCCCGACCAC ACTCAGGGGK TGCGTGCTGC
S P G S S G R R R G P R P H S G X A C C>
P Q A P Q G G E G D P D H T Q G X R A A>
V P R L L R E E K G T P T T L R G C V L>
310 320 330 340 350 360
GGGCCGGGCT CAGGAGGGGG TACCTGGGGG GTGTCTTCCT GGAACCACTG CTCCGTTTCT
G P G S G G G T W G V S S W N H C S V S>
G R A Q E G V P G G C L P G T T A P F L>
R A G L R R G Y L G G V F L E P L L R F>

FIG. 10

```
        370         380         390         400         410         420
                     *           *                                   *
CTTCCCAAAT GTTCTCATGC ATTCATTGTG GATTTTCTCT ATTTTCCTTT TAGTGGAGAA
 L  P  K   C  S  H  A   F  I  V   D  F  L   Y  F  P  F   S  G  E>
  F  P  N   V  L  M   H  S  L  W   I  F  S   I  F  L   L  V  E  K>
S  S  Q  M   F  S  C   I  H  C   G  F  S  L   F  S  F   *  W  R>

        430         440         450         460         470         480
                     *           *                                   *
GCATCTGAAA GAAAAAGGCC GGACTCGGGC TGTTCAACTT CAAAAGACAC CAAGTACCAG
 A  S  E   R  K  R  P   D  S  G   C  S  T   S  K  D  T   K  Y  Q>
  H  L  K   E  K  G   R  T  R  A   V  Q  L   Q  K  T   P  S  T  S>
S  I  *  K   K  K  A   G  L  G   L  F  N  F   K  R  H   Q  V  P>

        490         500         510         520
                     *           *
TCGGTGTACG TCATATCCGA GGAGAAGGAC GAGTGCGTCA TCGCA
 S  V  Y   V  I  S  E   E  K  D   E  C  V   I  A>
  R  C  T   S  Y  P   R  R  R  T   S  A  S   S>
V  G  V  R   H  I  R   G  E  G   R  V  R  H   R>
```

FIG. 10 (cont'd)

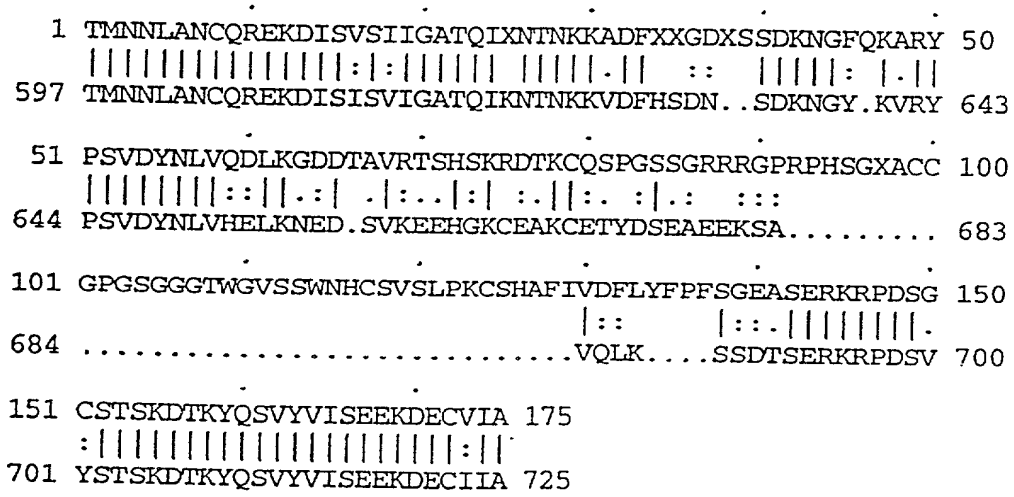
1 TMNNLANCQREKDISVSIIGATQIXNTNKKADFXXGDXSSDKNGFQKARY 50
597 TMNNLANCQREKDISISVIGATQIKNTNKKVDFHSDN..SDKNGY.KVRY 643
51 PSVDYNLVQDLKGDDTAVRTSHSKRDTKCQSPGSSGRRRGPRPHSGXACC 100
644 PSVDYNLVHELKNED.SVKEEHGKCEAKCETYDSEAEEKSA..... 683
101 GPGSGGGTWGVSSWNHCSVSLPKCSHAFIVDFLYFPFSGEASERKRPDSG 150
684 .....VQLK....SSDTSERKRPDSV 700
151 CSTSKDTKYQSVYVISEEKDECVIA 175
701 YSTSKDTKYQSVYVISEEKDECIIA 725

FIG. 11

```
        10         20         30         40         50         60
    *   *      *   *      *   *      *   *      *   *      *   *
CATTGGGTAC GGGCCCCCCT CGAGGTCGAC GGTATCGATA AGCTTGATAT CGAATTCCGG

        70         80         90        100        110        120
    *   *      *   *      *   *      *   *      *   *      *   *
CTTCACCTGG CCGGGCACCT TCTCTCTGAT TATTGAAGCT CTCCACACAG ATTCTCCTGA

       130        140        150        160        170        180
    *   *      *   *      *   *      *   *      *   *      *   *
TGACCTCGCA ACAGAAAACC CAGAAAGACT CATCAGCCGC CTGGCCACCC AGAGGCACCT

       190        200        210        220        230        240
    *   *      *   *      *   *      *   *      *   *      *   *
GACGGTGGGC CAGGAGTGGT CCCAGGACCT GCACAGCAGC GGCCGCACGG ACCTCAAGTA

       250        260        270        280        290        300
    *   *      *   *      *   *      *   *      *   *      *   *
CTCCTACCGC TTCGTGTGTC ACCAACACTA CTACGGAGAG GGCTGCTCCG TTTTCTGCCG

       310        320        330        340        350        360
    *   *      *   *      *   *      *   *      *   *      *   *
TCCCCGGGAC GATGCCTTCG GCCACTTCAC CTGTGGGGAG CGTGGGGAGA AAGTGTGCAA

       370        380        390        400        410        420
    *   *      *   *      *   *      *   *      *   *      *   *
CCCTGGCTGG AAAGGGCCCT ACTGCACAGA GCCGATCTGC CTGCCTGGAT GTGATGAGCA

       430        440        450        460        470        480
    *   *      *   *      *   *      *   *      *   *      *   *
GCATGGATTT TGTGACAAAC CAGCGGAATG CAAGTGCAGA GTGGGCTGGC AGGGCCGGTA

       490        500        510        520        530        540
    *   *      *   *      *   *      *   *      *   *      *   *
CTGTGACGAG TGTATCCGCT ATCCAGGCTG TCTCCATGGC ACCTGCCAGC AGCCCTGGCA

       550        560        570        580        590        600
    *   *      *   *      *   *      *   *      *   *      *   *
GTGCAACTGC CAGGAAGGNT GGGGGCGCCT TTTCTGCAAC CAGGACCTGA ACTACTGCAC

       610        620        630        640        650        660
    *   *      *   *      *   *      *   *      *   *      *   *
ACACCATAAG CCCTGCAAGA ATGGAGCCAC CTGCAACAAA CACGGGCCAG GGGGAGCTAC

       670        680        690        700        710        720
    *   *      *   *      *   *      *   *      *   *      *   *
ACTTGGTCTT TGGCCGGNCT GGGGTACANA GGGTGCCACC TGCGAAGCTT GGGGATTGGA

       730        740        750        760        770        780
    *   *      *   *      *   *      *   *      *   *      *   *
CGAGTTGTTG ACCCCAGCCC TTGGTAAGAA CGGAGGGAGC TTGACGGATC TTCGGAGAAC

       790        800        810        820        830        840
    *   *      *   *      *   *      *   *      *   *      *   *
AGCTACTCCT GTACCTGCCC ACCCGGCTTC TACGGCAAAA TCTGTGAATT GAGTGCCATG

       850        860        870        880        890        900
    *   *      *   *      *   *      *   *      *   *      *   *
ACCTGTGCGG ACGGCCCTTG CTTTAACGGG GGTCGGTGCT CAGACAGCCC CGATGGAGGG
```

FIG. 12A

```
      910         920         930         940         950         960
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
TACAGCTGCC GCTGCCCCGT GGGCTACTCC GGCTTCAACT GTGAGAAGAA AATTGACTAC

      970         980         990        1000        1010        1020
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
TGCAGCTCTT CACCCTGTTC TAATGGTGCC AAGTGTGTGG ACCTCGGTGA TGCCTACCTG

     1030        1040        1050        1060        1070        1080
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
TGCCGCTGCC AGGCCGGCTT CTCGGGGAGG CACTGTGACG ACAACGTGGA CGACTGCGCC

     1090        1100        1110        1120        1130        1140
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
TCCTCCCCGT GCGCCAACGG GGGCACCTGC CGGGATGGCG TGAACGACTT CTCCTGCACC

     1150        1160        1170        1180        1190        1200
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
TGCCCGCCTG GCTACACGGG CAGGAACTGC AGTGCCCCCG CCAGCACGTG CGAGCACGCA

     1210        1220        1230        1240        1250        1260
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
CCCTGCCACA ATGGGGCCAC CTGCCACGAG AGGGGCCACC GCTATNTGTG CGAGTGTGCC

     1270        1280        1290        1300        1310        1320
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
CGAAGCTACG GGGGTCCCAA CTCCCANTTC CTGCTCCCCG AAACTGCCCC CCCGGCCCCA

     1330        1340        1350        1360        1370        1380
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
CGGTGGTGGA AACTCCCCTA AAAAAACCTA AAAGGGCCGG GGGGGGCCCA TCCCCTTGGT

     1390        1400        1410        1420        1430        1440
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
GGACGTGTGC GCCGGGGTCA TCCTTGTCCT CATGCTGCTC CTGGGCTGTG CCGCTGTGGT

     1450        1460        1470        1480        1490        1500
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
GGTCTGCGTC CGGCTGAGGC TGCAGAAGCA CCGGCCCCCA CCCGACCCCT GNCGGGGGGA

     1510        1520        1530        1540        1550        1560
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
GACGGAGACC ATGAACAACC TGGNCAACTG CCAGCGTGAG AAGGACATCT CAGTCAGCAT

     1570        1580        1590        1600        1610        1620
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
CATCGGGGNC ACGCAGATCA AGAACACCAA CAAGAAGGCG GACTTCCACG GGGACCACAG

     1630        1640        1650        1660        1670        1680
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
NGCCGACAAG AATGGCTTCA AGGCCCGCTA CCCAGNGGTG GACTATAACC TCGTGCAGGA

     1690        1700        1710        1720        1730        1740
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
CCTTCAAGGGT GACGACACCG CCGTCAGCGA CGCGCACAGC AAGCGTGACA CCAAGTGNCA

     1750        1760        1770        1780        1790        1800
  *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
GCCCCAGGGC TCCTCAGGGG AGGACAAGGG GACCCCCGAC CCACACTCAG GGGGTGGAGG

     1810        1820        1830        1840        1850        1860
  *   *   *   *   *   *   *                                   *   *
```

FIG. 12A (cont'd)

```
AAGCATCTTG AAAGAAAAAG GCCGGACTTC GGGCTTGTTC AACTTTCAAA AGACAANCAA

      1870       1880       1890       1900       1910       1920
    *    *     *    *     *    *     *    *     *    *     *    *
NGTACAAGTC GGTGTNCGTC ATTTCCGNAG GAGGAAGGNT GACTGCGTCA TAGGAANTTG

      1930       1940       1950       1960       1970       1980
    *    *     *    *     *    *     *    *     *    *     *    *
AGGTNGTAAA NTCGNAGTTG ANNTTGCAAA GNNNTCCCCG GATTCCGNTT TCAAAGTTTT

T
```

FIG. 12A (cont'd)

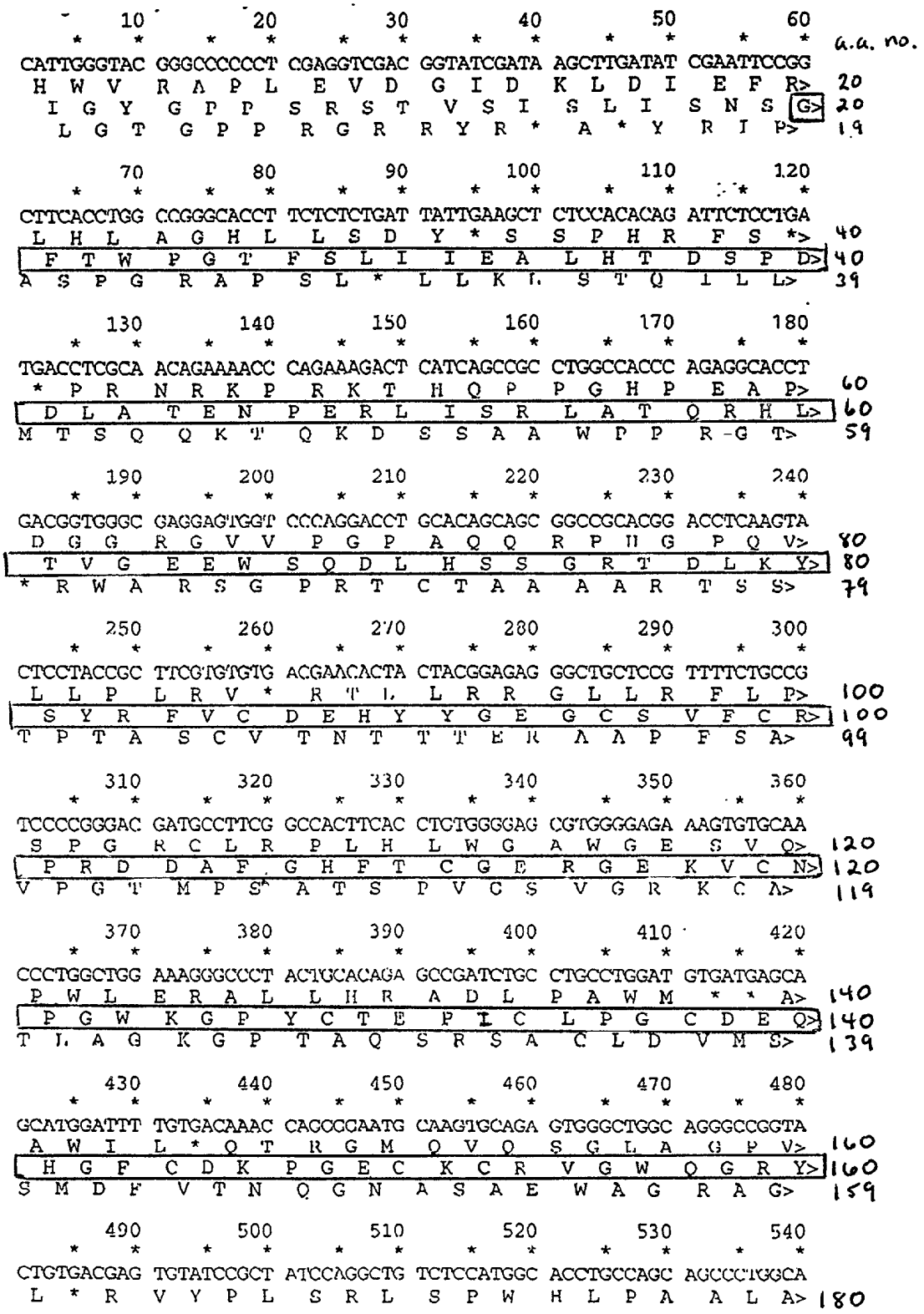
10 20 30 40 50 60
a.a. no.
CATTGGGTAC GGGCCCCCCT CGAGGTCGAC GGTATCGATA AGCTTGATAT CGAATTCCGG
H W V R A P L E V D G I D K L D I E F R>
I G Y G P P S R S T V S I S L I S N S G>
L G T G P P P R G R R Y R * A * Y R I P>
70 80 90 100 110 120
CTTCACCTGG CCGGGCACCT TCTCTCTGAT TATTGAAGCT CTCCACACAG ATTCTCCTGA
L H L A G H L L S D Y * S S P H R F S *>
F T W P G T F S L I I E A L H T D S P D>
A S P G R A P S L * L L K L S T Q I L L>
130 140 150 160 170 180
TGACCTCGCA ACAGAAAACC CAGAAAGACT CATCAGCCGC CTGGCCACCC AGAGGCACCT
* P R N R K P R K T H Q P P G H P E A P>
D L A T E N P E R L I S R L A T Q R H L>
M T S Q Q K T Q K D S S A A W P P R G T>
190 200 210 220 230 240
GACGGTGGGC GAGGAGTGGT CCCAGGACCT GCACAGCAGC GGCCGCACGG ACCTCAAGTA
D G G R G V V P G P A Q Q R P H G P Q V>
T V G E E W S Q D L H S S G R T D L K Y>
* R W A R S G P R T C T A A A A R T S S>
250 260 270 280 290 300
CTCCTACCGC TTCGTGTGTG ACGAACACTA CTACGGAGAG GGCTGCTCCG TTTTCTGCCG
L L P L R V * R T L L R R G L L R F L P>
S Y R F V C D E H Y Y G E G C S V F C R>
T P T A S C V T N T T T E R A A P F S A>
310 320 330 340 350 360
TCCCCGGGAC GATGCCTTCG GCCACTTCAC CTCTGGGGAG CGTGGGGAGA AAGTGTGCAA
S P G R C L R P L H L W G A W G E S V Q>
P R D D A F G H F T C G E R G E K V C N>
V P G T M P S A T S P V C S V G R K C A>
370 380 390 400 410 420
CCCTGGCTGG AAAGGGCCCT ACTGCACAGA GCCGATCTGC CTGCCTGGAT GTGATGAGCA
P W L E R A L L H R A D L P A W M * * A>
P G W K G P Y C T E P I C L P G C D E Q>
T L A G K G P T A Q S R S A C L D V M S>
430 440 450 460 470 480
GCATGGATTT TGTGACAAAC CAGCCGAATG CAAGTGCAGA GTGGGCTGGC AGGGCCGGTA
A W I L * Q T R G M Q V Q S G L A G P V>
H G F C D K P G E C K C R V G W Q G R Y>
S M D F V T N Q G N A S A E W A G R A G>
490 500 510 520 530 540
CTGTGACGAG TGTATCCGCT ATCCAGGCTG TCTCCATGGC ACCTGCCAGC AGCCCTGGCA
L * R V Y P L S R L S P W H L P A A L A>
180

FIG. 12B

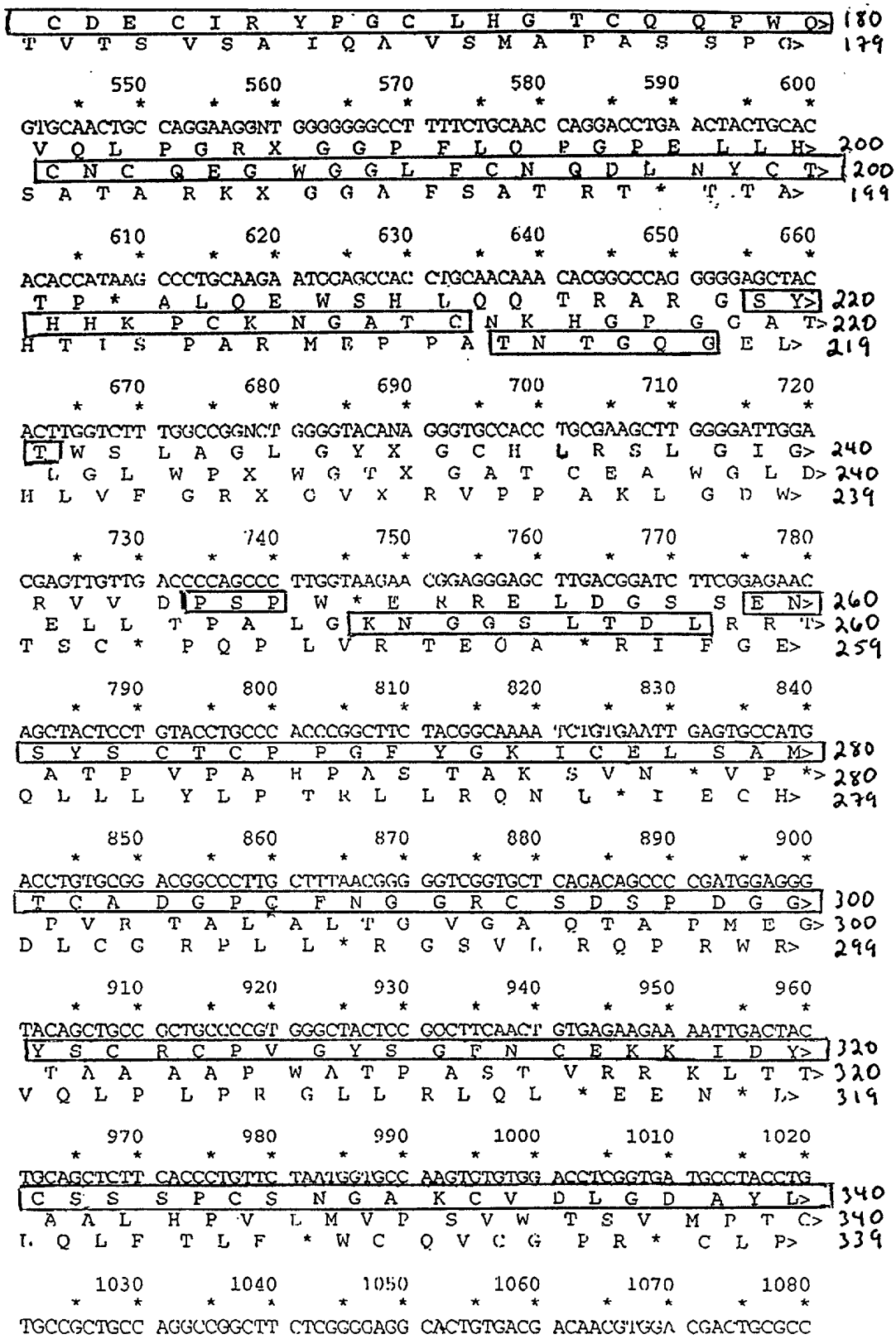

FIG. 12B (cont'd)

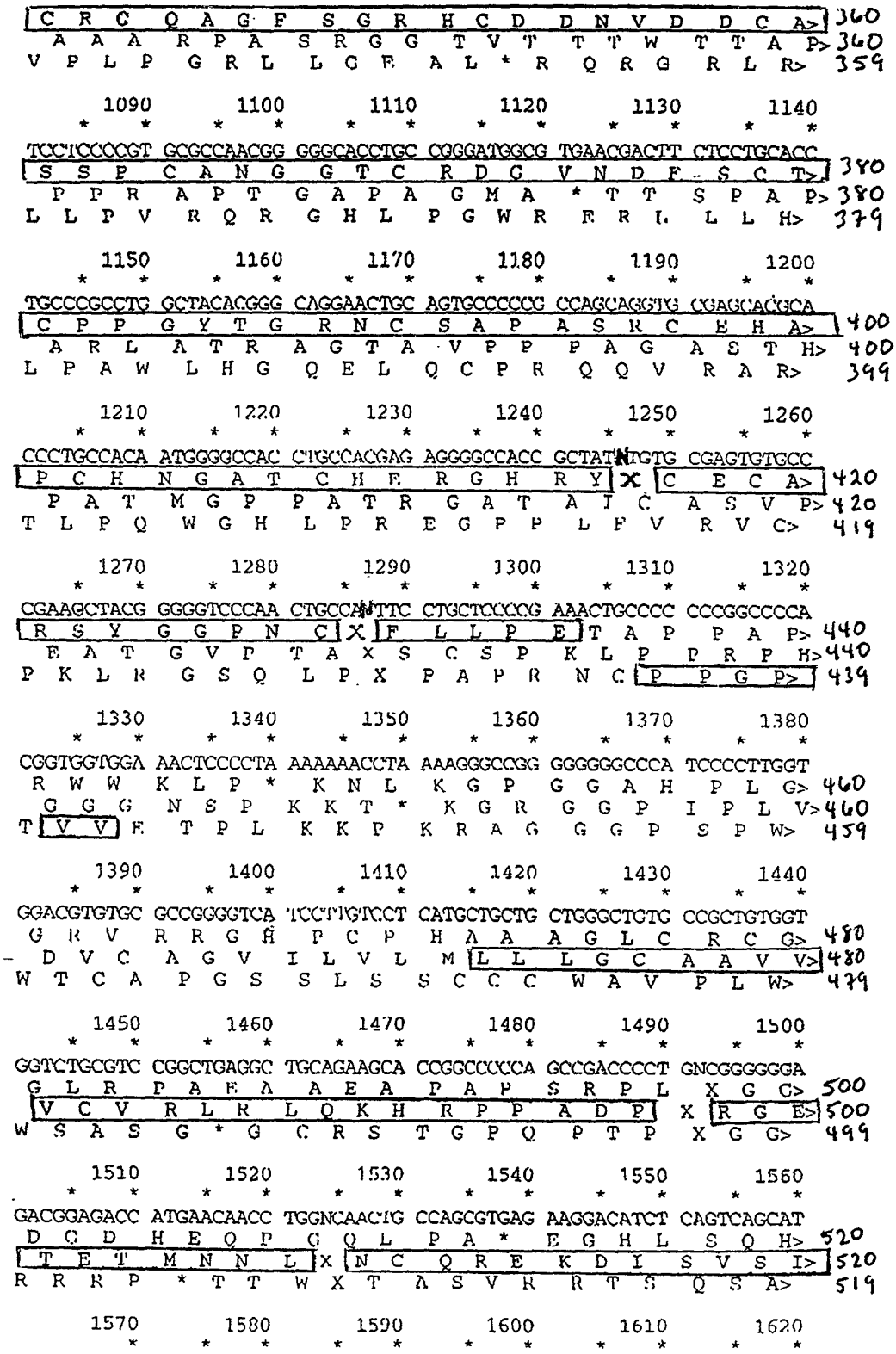

FIG. 12B (cont'd)

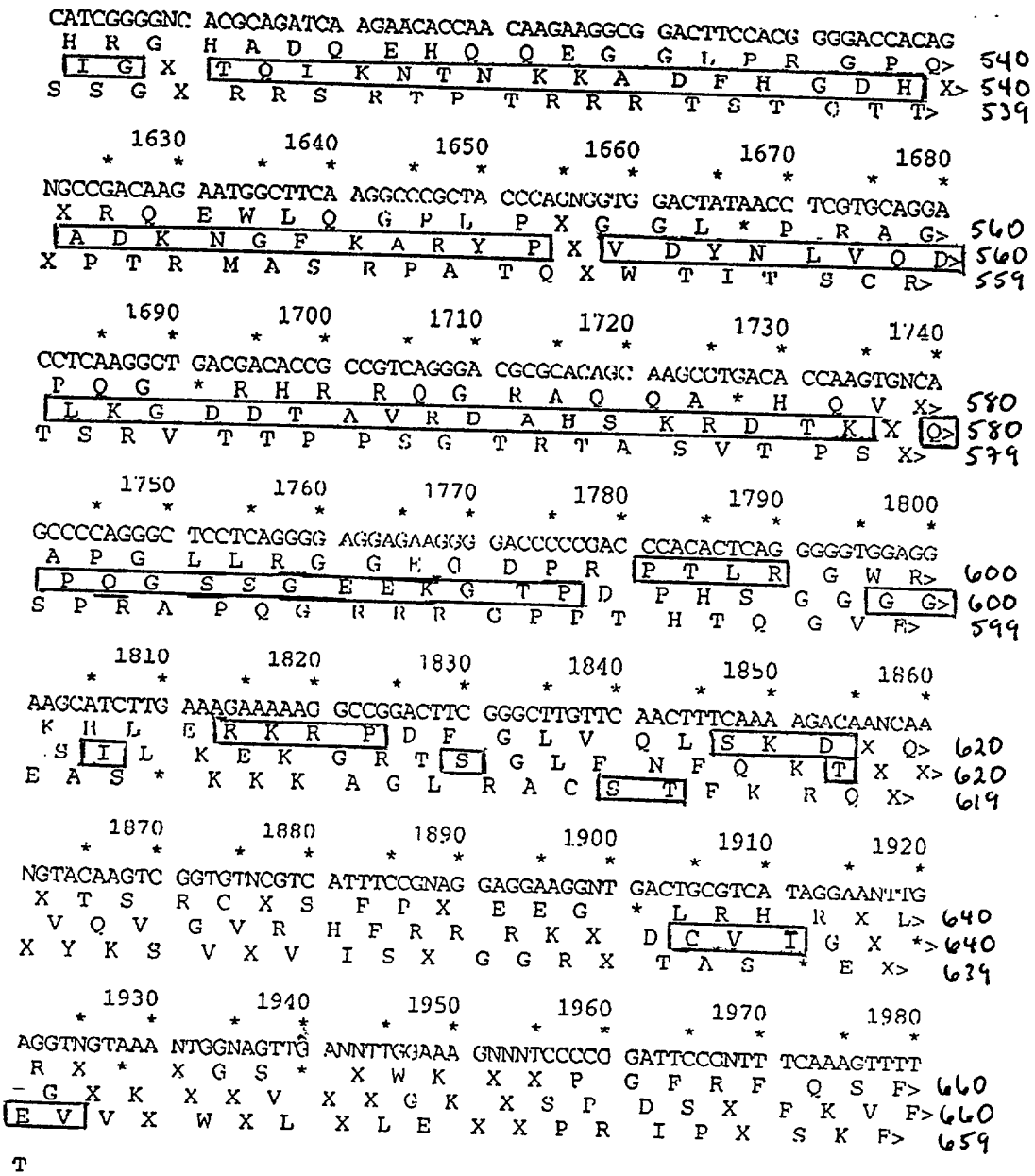

FIG. 12B (cont'd)

Mouse Delta vs Partial Human Delta

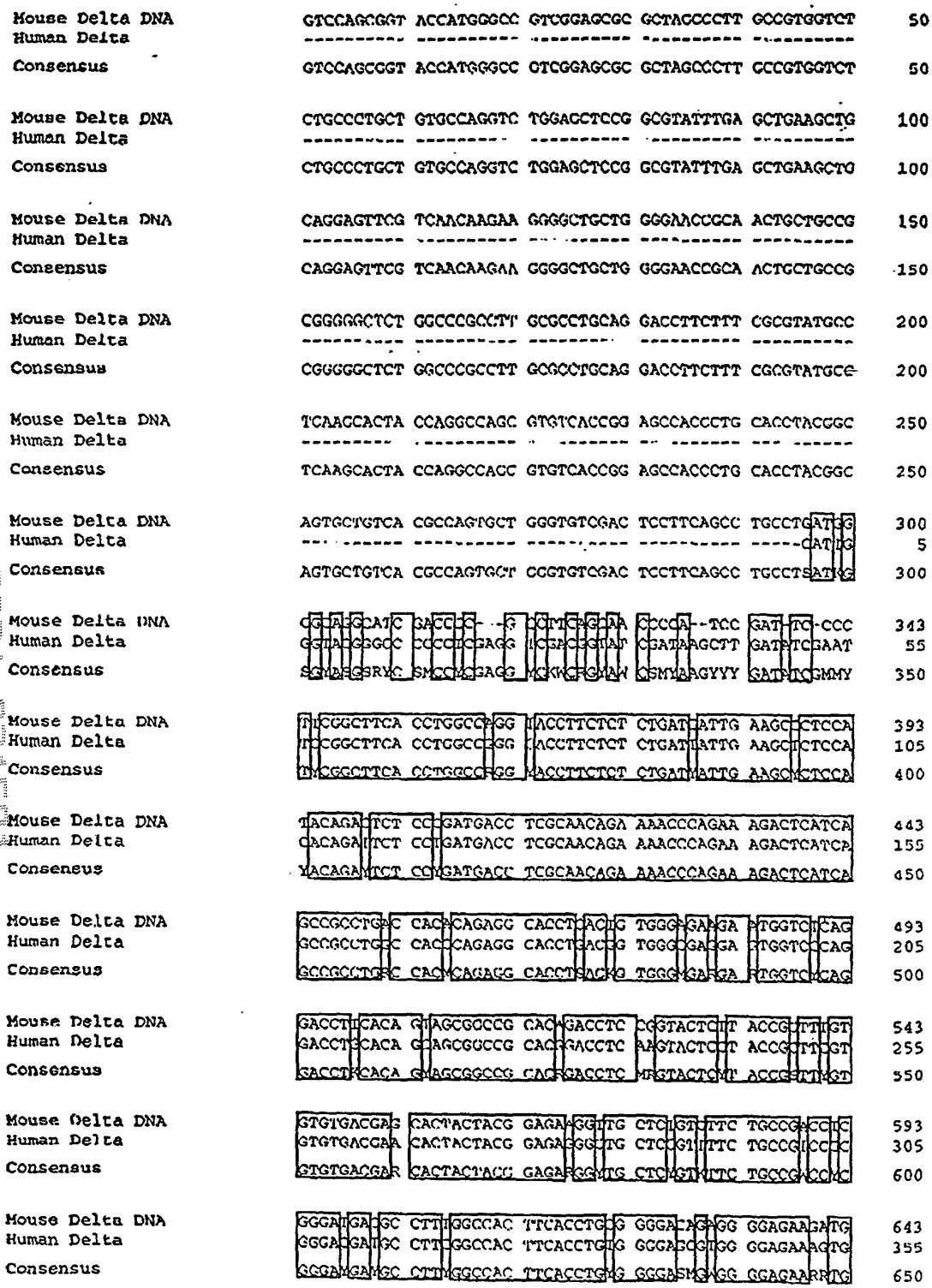

FIG. 13

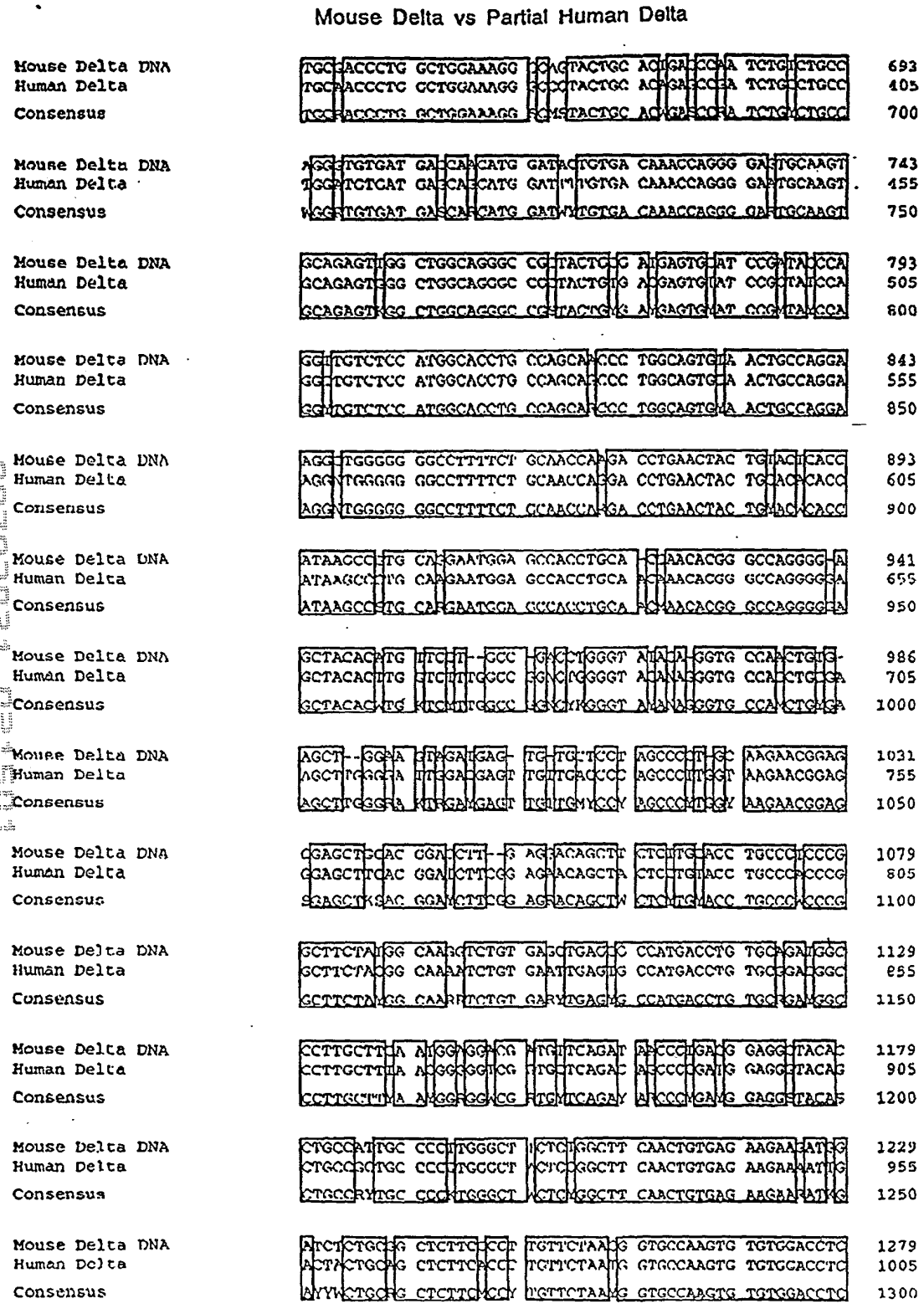
Mouse Delta vs Partial Human Delta
Mouse Delta DNA
Human Delta
Consensus
693
405
700
743
455
750
793
505
800
843
555
850
893
605
900
941
655
950
986
705
1000
1031
755
1050
1079
805
1100
1129
655
1150
1179
905
1200
1229
955
1250
1279
1005
1300

FIG. 13 (cont'd)

Mouse Delta vs Partial Human Delta

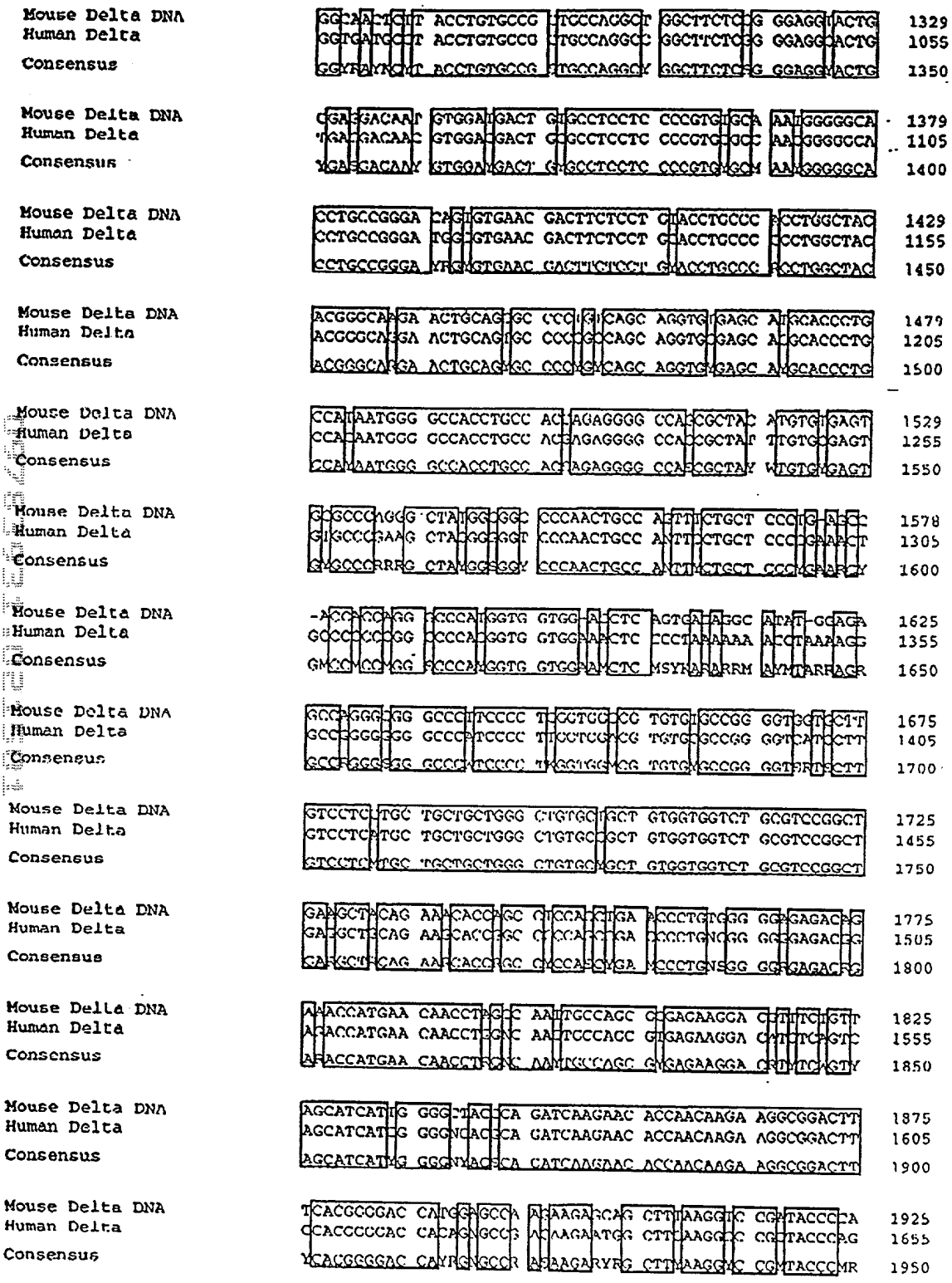

FIG. 13 (cont'd)

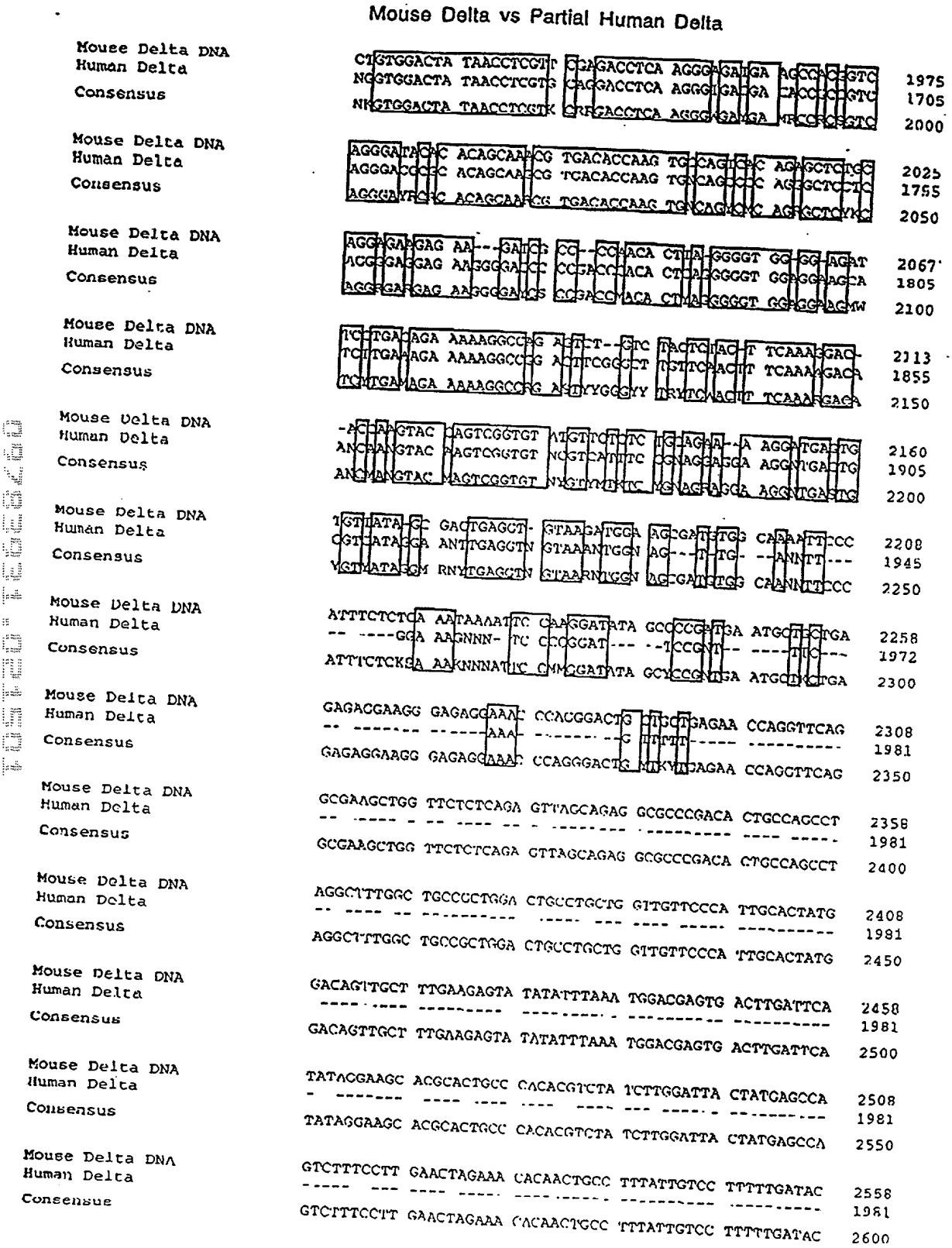
Mouse Delta vs Partial Human Delta
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus
Mouse Delta DNA
Human Delta
Consensus

FIG. 13 (cont'd)

Mouse Delta vs Partial Human Delta

```
Mouse Delta DNA  TGAGATGTGT TTTTTTTTT CCTAGACGGG AAAAAGAAAA CGTGTGTTAT  2608
Human Delta      ---------- --------- ---------- ---------- ----------  1981
Consensus        TGAGATGTGT TTTTTTTTT CCTAGACGGG AAAAAGAAAA CGTGTGTTAT  2650

Mouse Delta DNA  TTTTTTGGGA TTTGTAAAAA TATTTTTCAT GATATCTGTA AAGCTTGAGT  2658
Human Delta      ---------- ---------- ---------- ---------- ----------  1981
Consensus        TTTTTTGGGA TTTGTAAAAA TATTTTTCAT GATATCTGTA AAGCTTGAGT  2700

Mouse Delta DNA  ATTTTGTGAC GTTCATTTTT TTATAATTTA AATTTTGGTA AATATGTACA  2708
Human Delta      ---------- ---------- ---------- ---------- ----------  1981
Consensus        ATTTTGTGAC GTTCATTTTT TTATAATTTA AATTTTGGTA AATATGTACA  2750

Mouse Delta DNA  AAGGCACTTC GGGTCTATGT GACTATATTT TTTTGTATAT AAATGTATTT  2758
Human Delta      ---------- ---------- ---------- ---------- ----------  1981
Consensus        AAGGCACTTC GGGTCTATGT GACTATATTT TTTTGTATAT AAATGTATTT  2800

Mouse Delta DNA  ATGGAATATT GTGCAAATGT TATTTGAGTT TTTTACTGTT TTGTTAATGA  2808
Human Delta      ---------- ---------- ---------- ---------- ----------  1981
Consensus        ATGGAATATT GTGCAAATGT TATTTGAGTT TTTTACTGTT TTGTTAATGA  2850

Mouse Delta DNA  AGAAATTCAT TTTAAAAATA TTTTTCCAAA ATAAATATAA TGAACTACA   2857
Human Delta      ---------- ---------- ---------- ---------- ---------  1981
Consensus        AGAAATTCAT TTTAAAAATA TTTTTCCAAA ATAAATATAA TGAACTACA  2899
```

FIG. 13 (cont'd)

G F T W P G T F S L I I E A L H T D S P D> 21

D L A T E N P E R L I S R L A T Q R H L> 41

T V G E E W S Q D L H S S G R T D L K Y> 61

S Y R F V C D E H Y Y G E G C S V F C R> 81

P R D D A F G H F T C G E R G E K V C N> 101

P G W K G P Y C T E P I C L P G C D E Q> 121

H G F C D K P G E C K C R V G W Q G R Y> 141

C D E C I R Y P G C L H G T C Q Q P W Q> 161

C N C Q E G W G G L F C N Q D L N Y C T> 181

H H K P C K N G A T C * T N T G Q G * 198

S Y T * P S P * K N G G S L T D L * 213

E N S Y S C T C P P G F Y G K I C E L S A M> 235

T C A D G P C F N G G R C S D S P D G G> 255

Y S C R C P V G Y S G F N C E K K I D Y> 275

C S S S P C S N G A K C V D L G D A Y L> 295

C R C Q A G F S G R H C D D N V D D C A> 315

S S P C A N G G T C R D G V N D F S C T> 335

C P P G Y T G R N C S A P A S R C E H A> 355

P C H N G A T C H E R G H R Y * C E C A> 374

R S Y G G P N C * F L L P E * P P G P * 391

V V * L L L G C A A V V V C V R L R L Q K H> 412

R P P A D P * R G E T E T M N N L * 428

N C Q R E K D I S V S I I G * T Q I K N T N> 449

K K A D F H G D H * A D K N G F K A R Y P * 469

V D Y N L V Q D L K G D D T A V R D A H S K R D T K * 495

Q P Q G S S G E E K G T P * P T L R * G G * 514

I * R K R P * S * S T * S K D * T * 526

C V I * E V * 531

FIG. 14